

## ABSTRACT

## DISPLAY SUBSTRATE AND DISPLAY DEVICE

5           A display substrate (1) comprising a plate, for example a glass plate (2),  
on which display elements, e.g. pixels (4-8) comprising pixel electrodes (72)  
and thin-film-transistors (69), and an acoustic transducer (10), e.g. a  
microphone, speaker or buzzer, formed from thin film layers over a cavity (28),  
are formed. The cavity (28) may be provided by powderblasting through the  
10   depth of the glass plate (2). The display substrate (1) with integrated acoustic  
transducer (10) may be incorporated in a display device, e.g. a liquid crystal  
display device (11). Also described is a discrete acoustic transducer,  
comprising a plate of an insulating material (102), a cavity (120) in the plate  
(102), a plurality of layers that have been deposited on the plate, and a  
15   moveable member (122) formed from the deposited layers and positioned over  
the cavity (120).

(Figure 1)

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